



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/425,636	10/22/1999	DOUGLAS QUONG	55197USA	9824

32692 7590 08/01/2003

3M INNOVATIVE PROPERTIES COMPANY  
PO BOX 33427  
ST. PAUL, MN 55133-3427

EXAMINER
----------

WEBMAN, EDWARD J

ART UNIT	PAPER NUMBER
----------	--------------

1617

DATE MAILED: 08/01/2003

17

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/425636

Applicant(s)

QUONG

Examiner

WEBMAN

Group Art Unit

1617

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

## P r i d f r Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

## Status

- ☒ Responsive to communication(s) filed on 3/29/02
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disp sition of Claims

- ☒ Claim(s) 1-10, 12-18 is/are pending in the application.
- ☐ Of the above claim(s) 9 is/are withdrawn from consideration.
- ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- ☒ Claim(s) 1-8, 10, 12-18 is/are rejected.
- ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- ☐ Claim(s) \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

## Pri rity under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
  - ☐ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been received.
  - ☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_.
  - ☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

## Attachment(s)

- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_
- ☐ Int rvi w Summary, PTO-413
- ☐ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Other \_\_\_\_\_

Office Acti n Summary

Art Unit: 1617

Applicants' TD is approved.

Claim 9 remains nonelected in view of applicants' election by phone of alginate as the one ultimate matrix material. See paper #6 page 2 filed 6/8/01.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-8, 10, 12-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Akashi et al. (US Patent No. 5,686,385).

Akashi et al. Teach a microcapsule for easily handling and improving physical properties. The microcapsule comprises an agricultural active ingredient, including a pheromone (title, abstract, column 3, lines 35-36, column 5, line 47, and column 8, lines 12-17). The active is encapsulated with alginates by spray drying (column 8, lines 55-56, column 3, lines 64-66, column 6, line 45).

Akashi et al. Further teach that auxiliary ingredients can be added to the microcapsule. Such auxiliary ingredients include a wetting agent, a surfactant, talc, and a UV absorbent (column 9, lines 55, 62, column 10, lines 1-2, and column 11, line 1).

Akashi et al. Further teach delivery via dispersion of the microparticles in water (column 9, line 27).

However, Akashi et al does not teach desiccated microcapsules exposed to humidity and rehydrated and/or dehydrated.

Art Unit: 1617

It would have been obvious to one of ordinary skill in the art at the time the invention was made to deliver a dispersion of alginate microcapsules containing pheromones to achieve the beneficial effect of handling and improving physical properties in view of Akashi et al.

As to the claimed exposure to humidity and rehydrating, it is well - known to one having ordinary skill in the art that spraying the composition into the environment, which has natural changes in humidity, would cause the composition to naturally dehydrate and rehydrate as the levels of humidity in the environment change. Further, Applicant has not shown that the means by which the humidity is formed is critical, and therefore the natural environmental moisture produced through humid air and rain reads on Applicant's claims.

As to the claimed weight percent, it is within the skill in the art to select optimal parameters such as ratios or weight percents of components in order to achieve a beneficial effect. See In re Boesch, 205 USPQ 215 (CCPA 19880). Therefore, the ratios or weight percents instantly claimed are not considered critical absent evidence showing unexpected and superior results.

As to the <sup>u</sup>not claimed curing step, the examiner notes that the claimed temperature range includes room temperature, namely 25°C.

It would be an obvious expedient to one of ordinary skill to store the Akashi et al microcapsule at room temperature prior to use because storage at such a temperature requires no additional cost for heating or cooling.

No claims allowed.


Art Unit: 1617

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edward J. Webman whose telephone number is 308-4432. The examiner can normally be reached on Monday-Friday 9am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, S. Padmanabhan can be reached on 305-1877. The fax phone numbers for the organization where this application or proceeding is assigned are 305-3592 for regular communications and 305-1235 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 308-1234.

Webman/tgd  
July 29, 2003

  
EDWARD J. WEBMAN  
EXAMINER  
U.S. PATENT & TRADEMARK  
OFFICE  
WASHINGTON, DC 20503